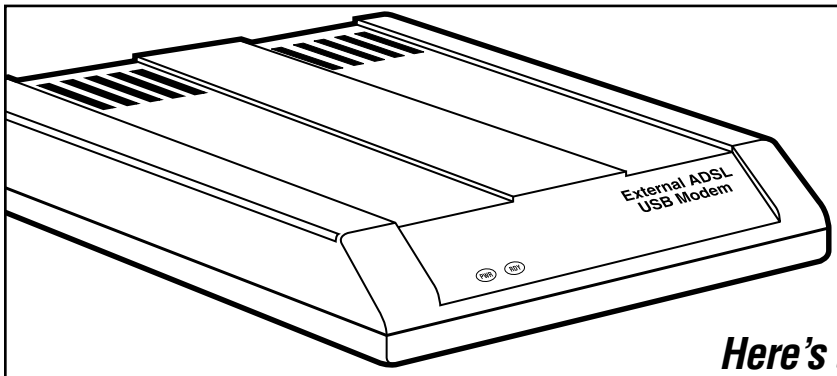
© 2001. All rights reserved.
Black Box Corporation.

BLACK BOX® NETWORK SERVICES

Black Box Corporation • 1000 Park Drive • Lawrence, PA 15055-1018 • Tech Support: 724-746-5500 • **www.blackbox.com** • **e-mail: info@blackbox.com**

EXTERNAL ADSL USB MODEM



Here's the modem for broadband applications and high-speed Internet access over ordinary copper lines.

Key Features

- ***Use one existing phone line for simultaneous voice, data, audio, and video***
- ***Always-on access with ADSL eliminates wait time.***
- ***Download using DMT data rates to 8 Mbps, upload to 1 Mbps.***
- ***Windows based diagnostics tool for viewing ADSL line info.***
- ***Compatible with virtually all DSLAM equipment on the market today.***
- ***Splitterless mode for easy installation.***

This USB-equipped external modem makes connecting to Asymmetric Digital Subscriber Line (ADSL) services over ordinary existing phone lines easy—and fast. Supporting up to 8-Mbps connections, the External ADSL USB Modem from Black Box offers up 160 times faster connectivity than traditional access technologies.

It's ideal for business or home users who require broadband for demanding videoconferencing, MP3, and multimedia applications. The benefits of ADSL enhance your overall Internet and remote access experience and enable you to work more efficiently. Plus, an ADSL connection is always on, so you don't have to wait for a dialup sequence, as one does with analog modems. And because ADSL service is offered over an analog phone line (by placing the ADSL signal above the frequency of the voice signal), you won't need an additional line to receive voice calls when you're on-line. Asymmetric operation of this sort is ideal for most home or small office setups, where users are more likely to download files than to upload information.

The modem operates in Discrete Multi-Tone (DMT Issue 2) based mode of operation. DMT mode supports ITU G.992.1 (G.DMT) and G.992.2 (G.lite) along with ANSI standard T1.413 issue 2 and gives you data rates of up to 8 Mbps receiving and 1 Mbps sending.

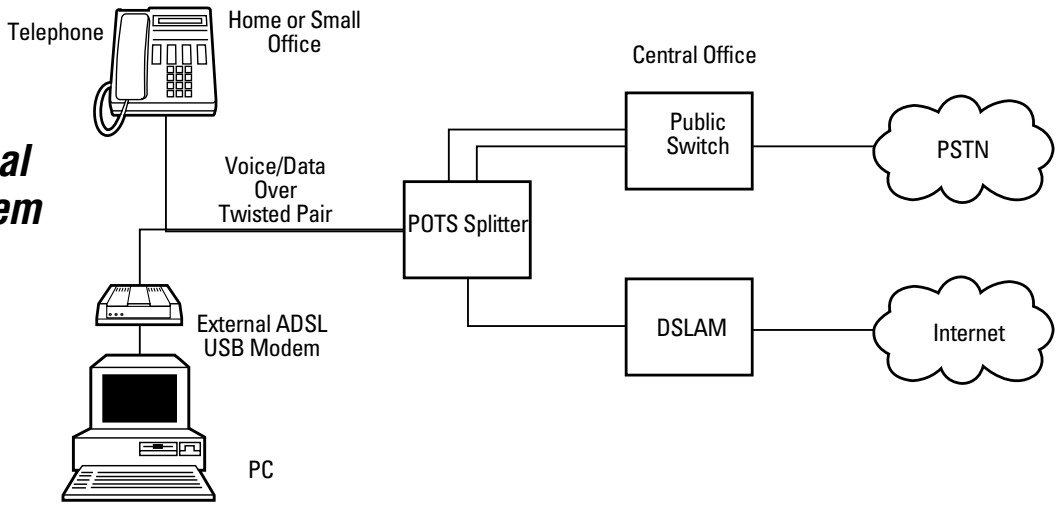
You can use the External ADSL USB Modem with most industry-standard Digital Subscriber Line Access Multiplexors (DSLAMs) that operate in DMT mode.

By getting USB technology in an external modem that can handle DMT communications, you're given convenience in an easy-to-install device. You don't have to remove the lid on your machine, inspect for IRQ conflicts and face CPU power drains, as you might with an internal modem card.

And the modem's splitterless, so you can install it yourself. Connect the box to the ADSL line via standard RJ-11 connections and to a PC via a standard USB interface. It comes with Windows® based configuration software, including an installation wizard that guides you through the configuration process. An easy-to-manage diagnostics tool even lets you view ADSL connection statistics and driver information, so you can troubleshoot ADSL link problems. When the green indicator is on in the Link Status field of the onscreen Control Panel, you know a modem connection has been made. A blinking indicator tells you that a connection is being established. The modem's transmitting and receiving data activity are shown separately by individual flashing yellow indicators on the Control Panel.

(continued on page 2)

A typical External ADSL USB Modem voice/data application.



(continued from page 1)

What's more, you can customize the modem's VPI, VCI, encapsulation, and modulation settings.

The modem is fully software upgradable so that new features and updates may be added by simply loading a new version of the device driver onto your PC.

Device drivers provided.

With the External ADSL USB Modem, you get WAN, LAN, and ATM device drivers. All three support the ATM protocol, but the ATM driver also works with ATM services available in recent Windows operating systems. (By using ATM framing, ADSL modems can securely and efficiently carry various types of traffic—for example, data, voice, and video—over the same network.)

By using the WAN driver, the modem can work like a dial-up type of modem (that is, establish calls via dial-up networking). The driver supports RFC 2364 with PVC connections, and RFC 1483 with PVC connections along with Point to Point Protocol over Ethernet (PPPoE). TCP/IP settings are automatically set up during the software installation process but can be modified if necessary. You can also easily change your IP address, server addresses and/or default gateway, too, through the driver's TCP/IP Settings window. Use the WAN driver with Windows 98, Windows 98 SE, Windows 2000, and Windows Me.

If you want the modem to appear as a LAN or Ethernet-type device, then install the LAN driver.

The ATM driver works in conjunction with ATM services provided by Windows. Both RFC 1577 and RFC 2364 are supported. To establish a PPP (RFC 2364) connection, the ATM driver uses dial-up networking to create a permanent or switched virtual circuit connection. This driver can be used with Windows 98 SE, Windows 2000, and Windows Me.

Each type of installation (LAN, WAN, and ATM) involves its own installation sequence guided by the modem's installation wizard. And several different protocols are used on top of ATM. The protocol required in your configuration depends on the equipment deployed by your DSL service provider.

Specifications

Data Rates: Downloads: 8 Mbps; Uploads: 1 Mbps

Data Standards: ITU G.992.1 (G.DMT), G.992.2 (G.lite), ANSI T1.413 Issue 2

Protocols: RFC 1483 LLC SNAP, RFC 1483 VCMUX Bridged, RFC 1483 VCMUX Routed, RFC 2364 LLC, RFC 2364 VCMUX, RFC 1577, RFC 2516PPoE

ATM Attributes: AAL Type AAL5

Bus Type: USB

Cables and Connectors: (1) RJ-11 cable, (2) RJ-11 jacks, (1) USB cable

Management: Windows based DSL diagnostics tool for Microsoft® Windows® 98, 98 SE, Me, and Windows 2000

Operating Systems Supported: Windows 98, 98 SE, Me, and Windows 2000

Temperature Tolerance: 32 to 122°F (0 to 50°C)

Approvals: FCC Part 15 and Part 68; IC CS03; CE mark; UL® 1950

Size: 1"H x 4.3"W x 5.7"D (2.5 x 10.9 x 14.5 cm)

Weight: 9.8 oz. (278 g)

Package Includes

- External ADSL USB Modem
- (1) RJ-11 cable
- (1) USB A–B cable
- (1) System CD (with software, manuals, readme files, Acrobat® Reader®, etc.)

Ordering Information

ITEM	CODE
External ADSL USB Modem	MD5010A
You may also need…	
USB Cable, A–B Plugs, 3-ft. (0.9-m)	USB01-0003
USB Extension Cable, A–A Plugs, 8-ft. (2.4-m)	USBR01-0008